May 2022

Inflation and the Policy Response to Supply Shocks

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Our Focus: Global, the Supply Side

Our focus is distinctive in two respects:

- It is global, not national.
- It emphasises supply, rather than demand.

With this in mind, we shall now study **three periods**:

(i) Recent Disinflationary Past

(ii) The Current Spike, and how to handle it

(iii) The Medium-Term Future

The Recent Disinflationary Past

Three narratives to explain it:

(a) Successful Central Bank policy

(b) Savings Glut; Secular Stagnation; negative demand shock

(c) Labour Supply Surge; Positive Supply shock

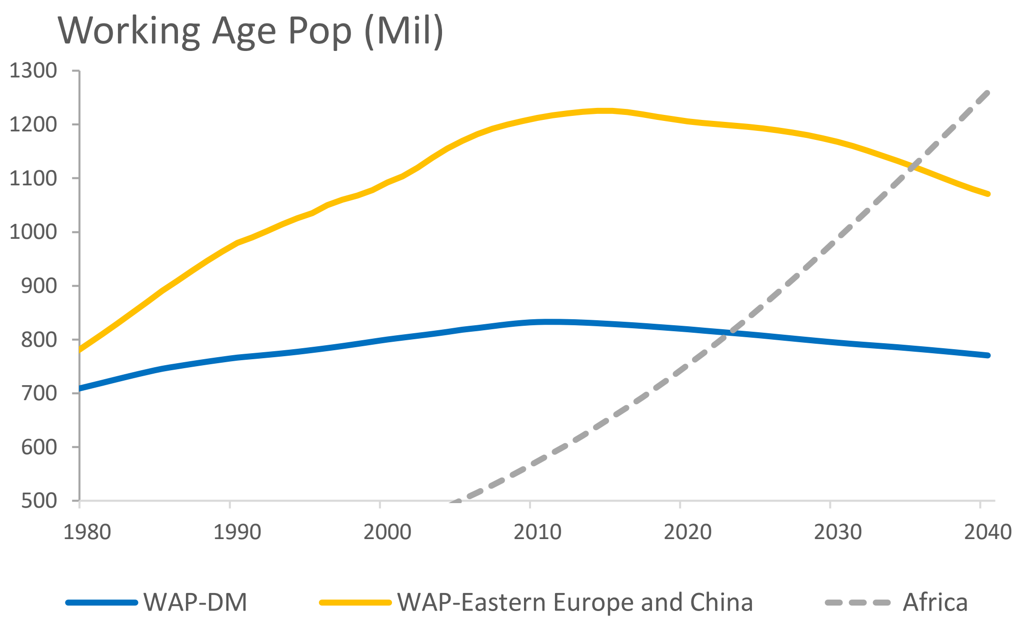
Not mutually exclusive. Our focus has been on (c).

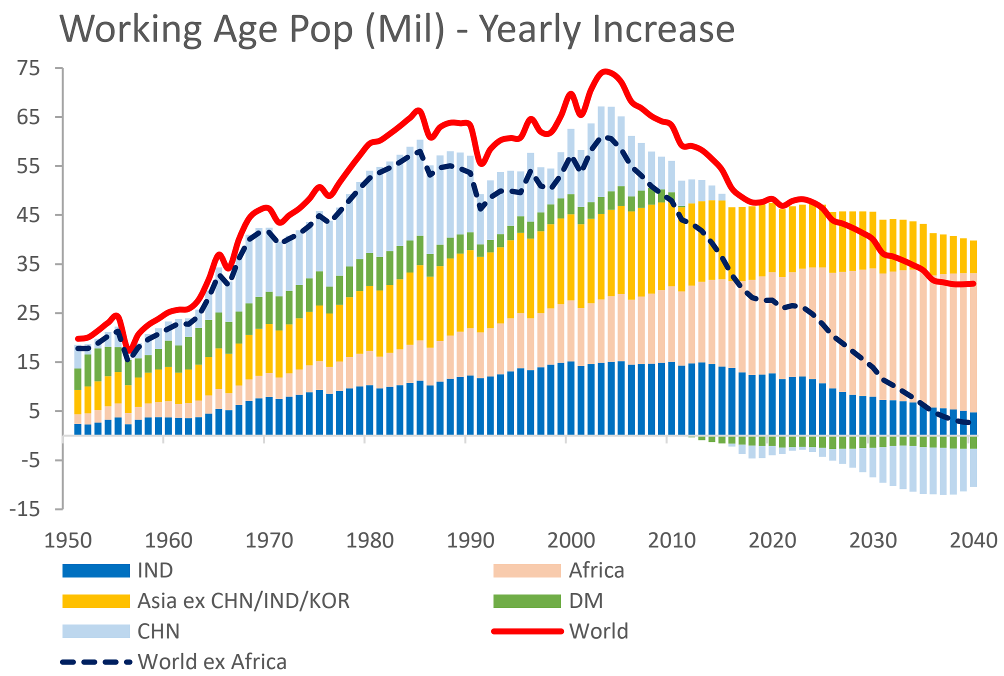
Both (b) and (c) are greatly influenced by China.

Both affect inflation similarly, but output differently.

Source: Talking Heads Macro

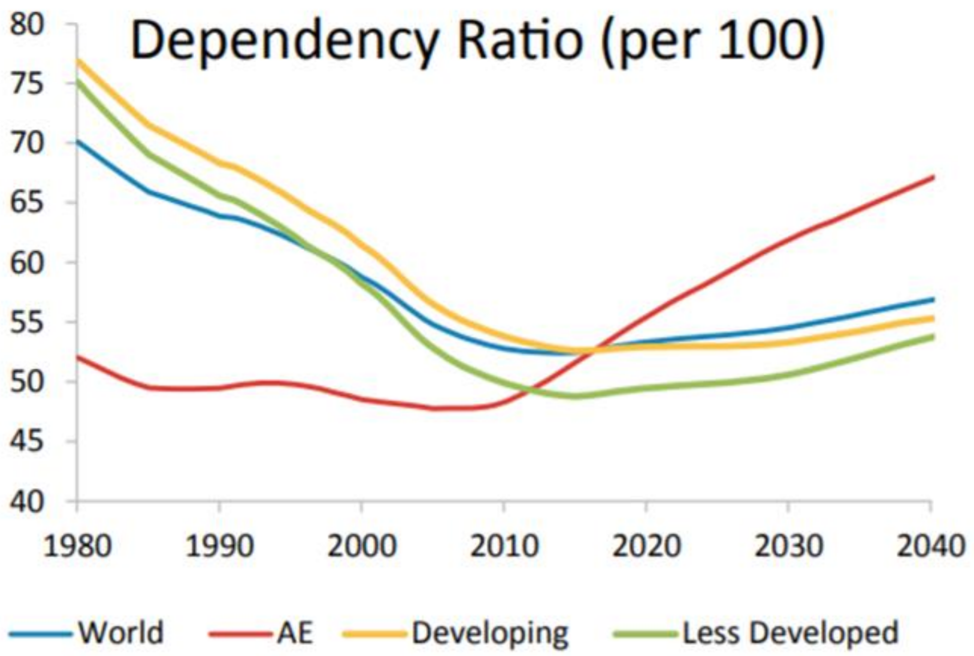
Working age populations falling globally

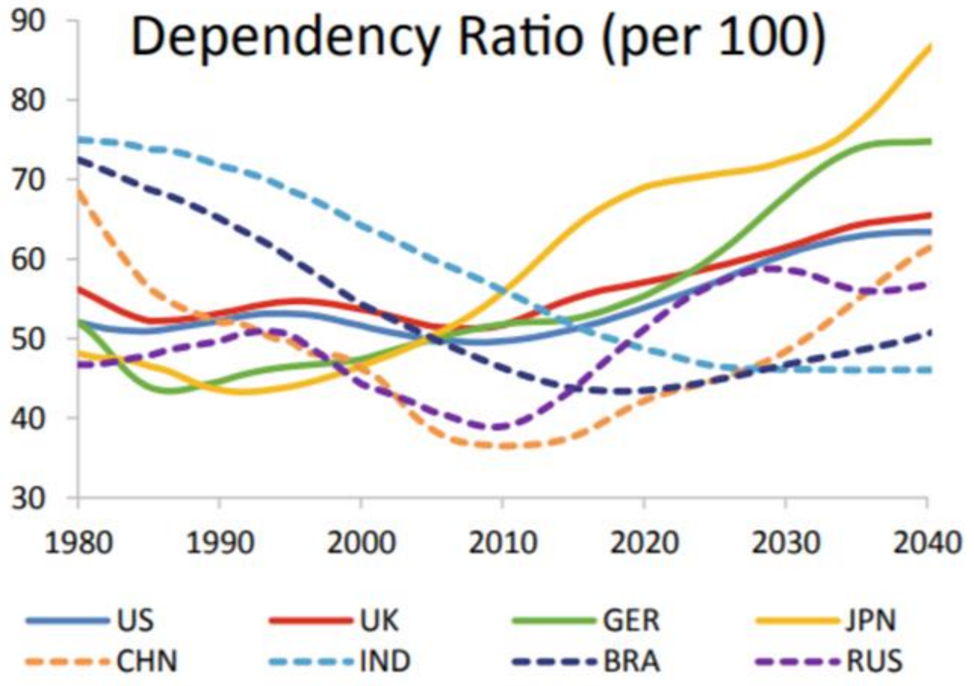




Source: Talking Heads Macro

Dependency Ratios are Rising in the AEs and North Asia





Source: Talking Heads Macro

Dependency Ratios Rising Due to the Old, Not the Young

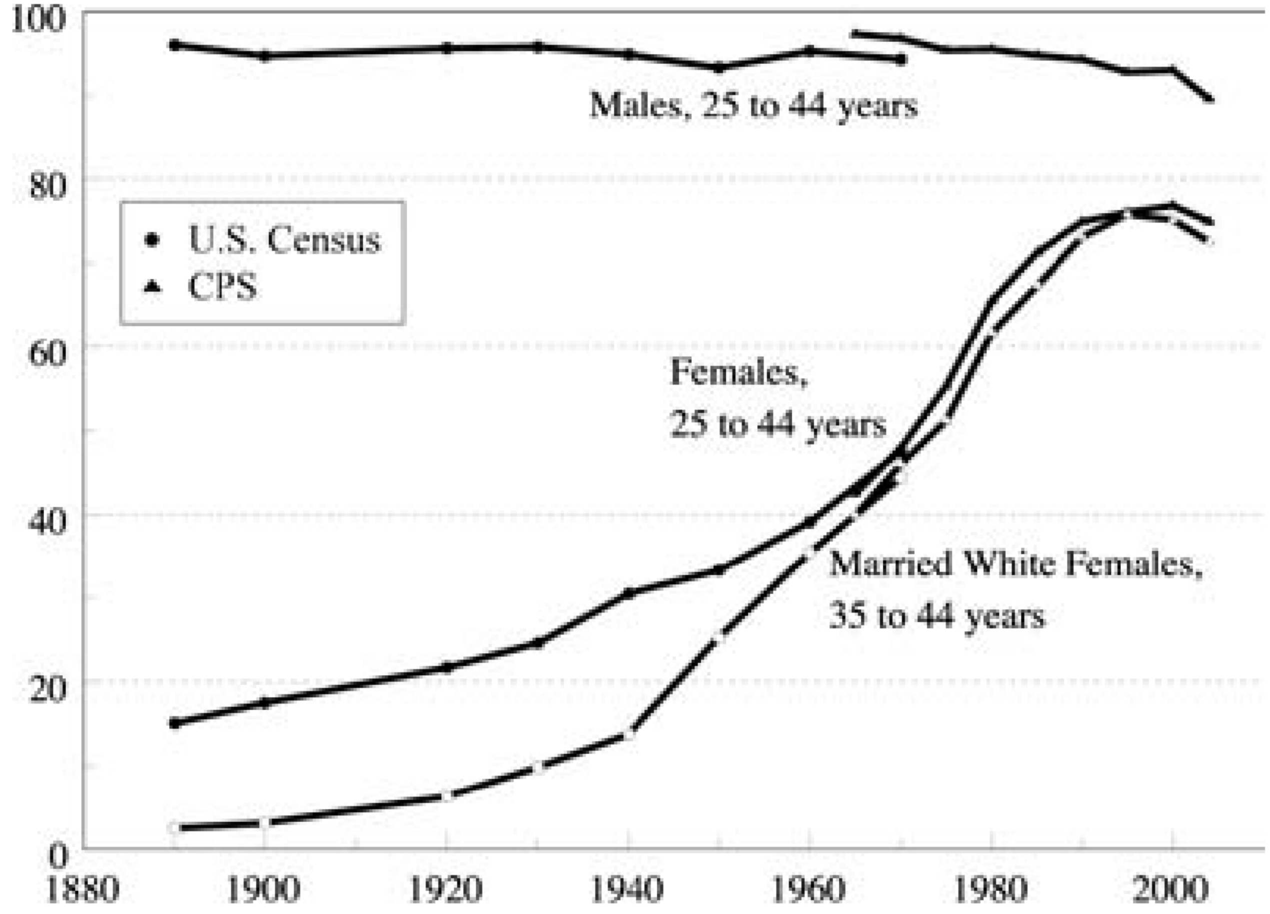
	USA	UK	Germany	Japan	China
Young					
1970	28	24	23	24	40
2010	20	17	14	13	19
Change 1970–2010:	–8	–7	–9	–11	–21
2010	20	17	14	13	19
2019	19	18	14	13	18
Change 2010–2019:	–1	1	0	0	–1
Retiree					
1970	10	13	24	7	4
2010	13	17	21	22	8
Change 1970–2010:	3	4	−3	15	4
2010	13	17	21	22	8
2019	16	19	22	28	11
Change 2010–2019:	3	2	1	6	3

Source UN Population Statistics

Source: Talking Heads Macro

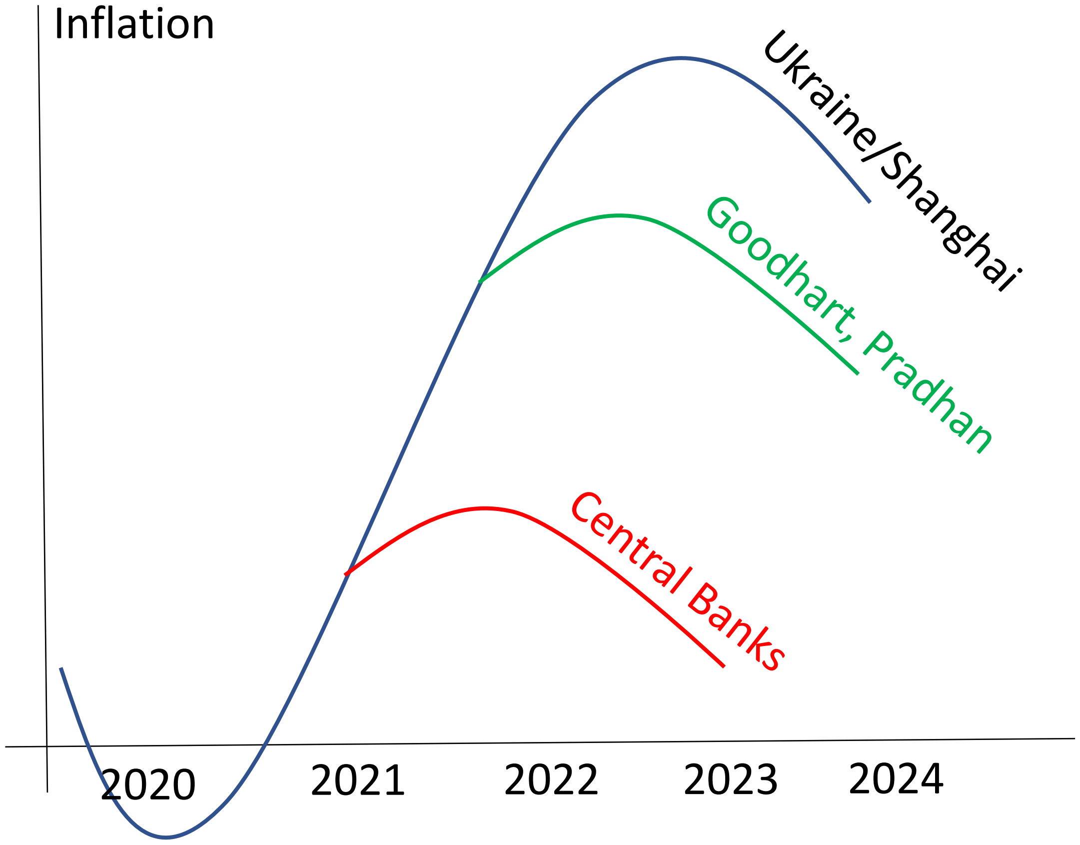
The Quiet Revolution That Transformed Women's Employment

Labour force participation rates for females and males by age and marital status: 1890-2004



Source: Talking Heads Macro

The Current Inflation Surge



Demand shock:
Fiscal policy, especially in USA
Monetary surge, especially in 2020
Summers/Blanchard

Supply shock:
Labour tightening, widespread
The Great Resignation
Covid supply shocks; not over, China
And now Ukraine

Central Banks a long way behind

Taylor rule:

$i = r^* + 1.5\,(\Pi - \Pi^*) + 1.0\,(Y - Y^*)$

How to Respond to this Surge?

When the disturbance is large, both expectations and wage/price adjustments will react to what *has* happened, not just to expectations of *future* inflation.

Central Bank confidence in anchored expectations is overly optimistic.

A wage/price spiral is beginning in the USA/UK, if perhaps not yet in EU.

Source: Talking Heads Macro

Should Nominal Interest Rates Rise Faster or Slower?

Arguments for Faster Increase on Nominal Interest Rates

(i) Way behind curve.

(ii) Real rates exceptionally low and still falling.

(iii) Central Banks losing credibility.

(iv) If not now, may require even more restriction and recession, as stagflation takes hold.

Arguments for Slower Increase in Nominal Interest Rates

(i) Financial and housing markets in extreme territory and unprepared for sharp rises.

(ii) A soft landing may still be possible.

(iii) Ukraine will cause a major decline in real incomes. Much worse in Europe and UK, which import energy and grain, than in USA, which exports these. No wish for policy to add to pressure.

(iv) Uncertainty is high. When uncertain, do not make large changes.

The Medium-Term Future

The **ECB, BoE** are currently accepting arguments for slow and steady.

The **Fed** has recently turned more hawkish.

Some **EME** Central Banks have already been forced to respond more urgently.

It will be a difficult exercise to return inflation to target without having to raise unemployment, perhaps significantly. Concerns about the stability of employment and financial markets may restrain the speed with which interest rates are raised. This makes it quite likely that the result, at least for the time being, might be stagflation.

If stagflation, then following concerns:-

- Central Bank Independence
- Fragmentation in EU
- Effects on Politics more broadly.

Longer-Term: The Next Few Decades

Dominated by Demography, which is largely predictable, and geo-politics, which is not.

Demography will be adverse. Falling WAP and rising dependency ratios, except in Africa.

Geo-politics adverse for the time being.

Other Factors:

(i) Reversal of globalisation	Raises inflation
(ii) Climate change (see Schnabel)	Raises Inflation
(iii) Africa	Could lower inflation
(iv) Technology	Could lower inflation
(v) Medical Advances, e.g. on Dementia	Could lower inflation

The Pushback To Our Long Term Thesis

Why Didn't It Happen in Japan?

- "Why didn't it happen in Japan", "Japan should inflate first" are similar(ly flawed) questions
- Japan aged when the rest of the world was flooded with labour – O-FDI provides some evidence

The Elderly and Savings

- Mian, Straub, Sufi see inequality as predetermined, we see it as endogenous to global demography
- Most empirical extrapolations of ageing vs saving ignore the exponential incidence of dementia with age

Technology

- We need as much mechanization as possible. No shortage of jobs today, or in the distant future

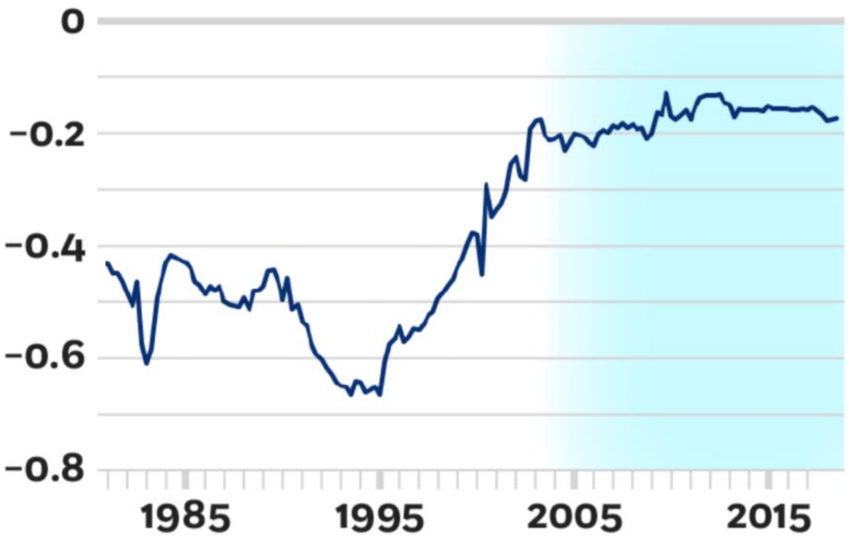
Environmental Perspective

- Inflationary (Schnabel, March 2022, "A new age of energy inflation")

The Fed Didn't Kill the Phillips Curve, China Put it in a Coma

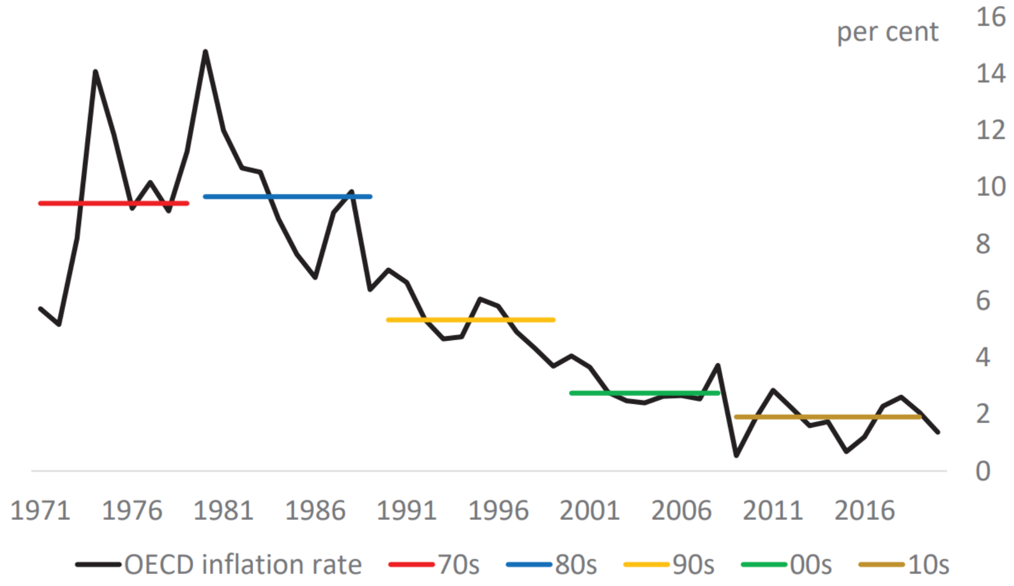
Phillips curve's slope

Closer to zero = weaker connection between US unemployment rate and previous 20 years of price inflation



Source: Hooper, Mishkin, Sufi, 2019, "Prospects for Inflation in a High Pressure Economy: Is the Phillips Curve Dead or is It Just Hibernating?", NBER WP No. 25792

China: A positive global supply shock that disinflated the world and raised growth



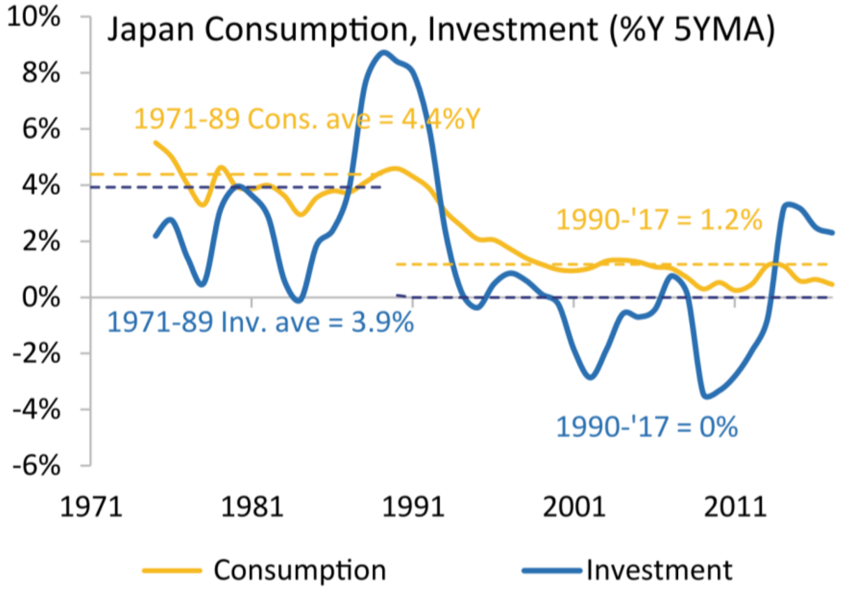
Source: Haldane, February 2021, "Inflation: A Tiger by the Tail", Bank of England Speech

China’s Global Disinflationary Impulse Has Passed

China: Japan-esque labour constraint

Services provide employment, **hi-tech** provides productivity, **SOEs** provide state control

Manufacturing, real estate losing importance

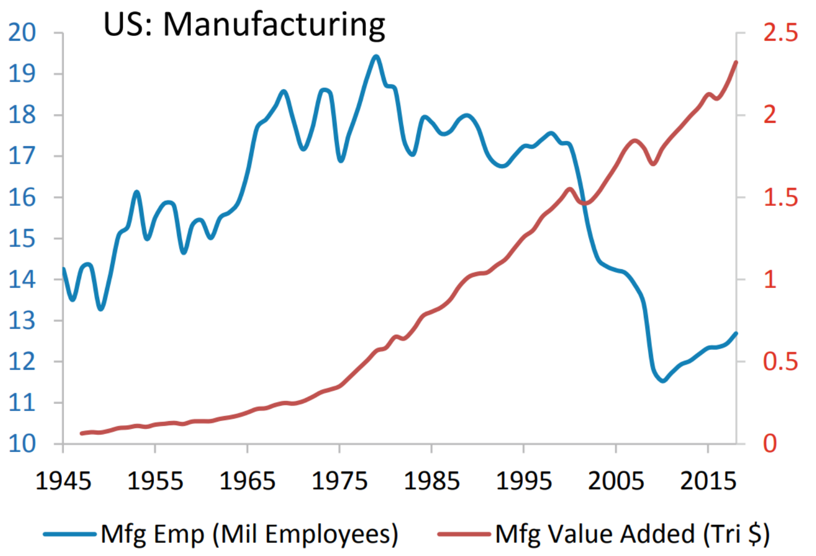


Source: China Ministry of Commerce

Geopolitical Reshoring of Mfg inflationary?

US/AE: capital/labour rises = disinflationary
US Inc.: globally sub-optimal cost of production

A **slow reversal** of Pierce and Schott’s “surprisingly swift decline of US manufacturing employment”?



Source: BEA, Pierce and Schott (2016), “The Surprisingly Swift Decline of US Manufacturing Employment”

Fed Hikes and the Global Central Bank ‘Peloton’

FX brings central banks close(r) to fundamentals as well as the Fed

Laggards (Japan, Sweden, Australia):

- Those with reason to tighten but reluctant to raise rates see weaker FX.
- Weaker FX pass-through raises breakeven inflation rates quickly, inflation slowly
- Nominal/breakeven rates rise, and the central bank tightens

Leaders (Brazil, Mexico… then New Zealand, Korea):

FX strength, disinflation, bond yields fall, central bank eases.

Are rising rates endogenous?

Global Cycle: The most synchronized recovery ever

Output gaps: Soon positive in AEs, negative in EMEs (Ex Cent/East Europe = CE3)

Housing: Strong in the AEs (ex NZ), weak in the EMEs (ex CE3)

Labour markets/shortages: Persistent in the AEs, Not in EMEs (ex CE3)

Source: Talking Heads Macroeconomics

The Search for 'Neutral'

As inflation rates rise markedly above target, markets remain on a path of 'price discovery' for the neutral nominal interest rate – both 1y1y (terminal rates) and 'neutral' (5y5y) estimates for markets have risen as inflation has surged.

The actual nominal interest rate needed to drive inflation back to target will depend on current levels of inflation, expectations thereof, and the current level of demand.

Assuming that these have already been hit would be premature. It would amount to assuming a success which has yet to be achieved and justified.

Without a peak in inflation (hard to say), positive real rates (Brazil, Mexico close), or significant damage to the real economy (Brazil, Mexico and housing markets in Korea, New Zealand), markets are not convinced that policy rates are near/above a neutral level.

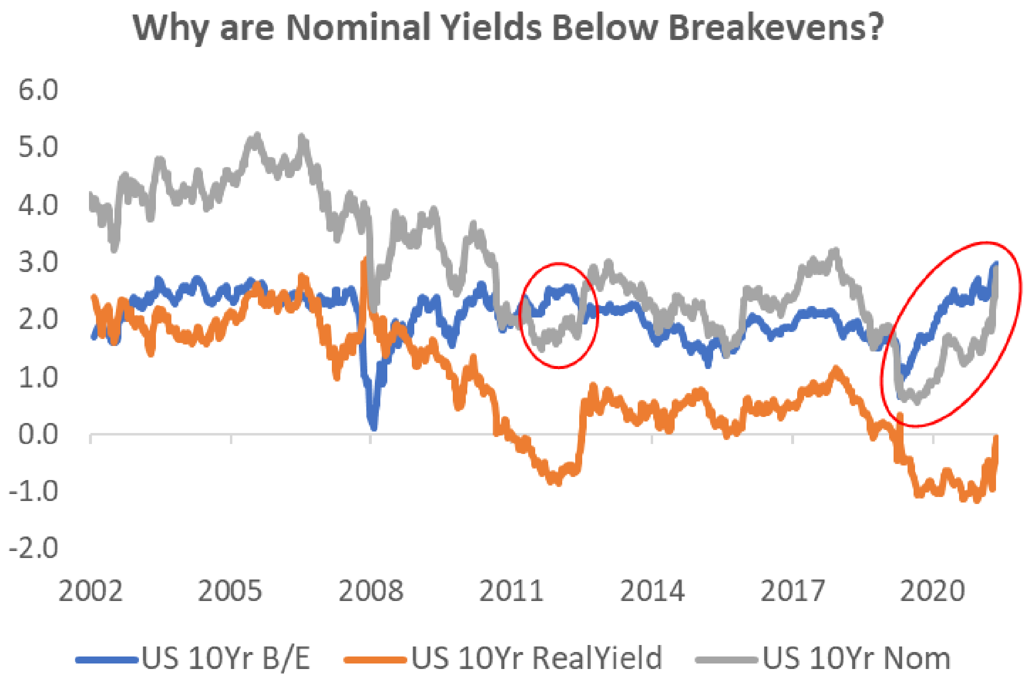
The concept of a neutral nominal interest rate is of little consolation at this juncture.

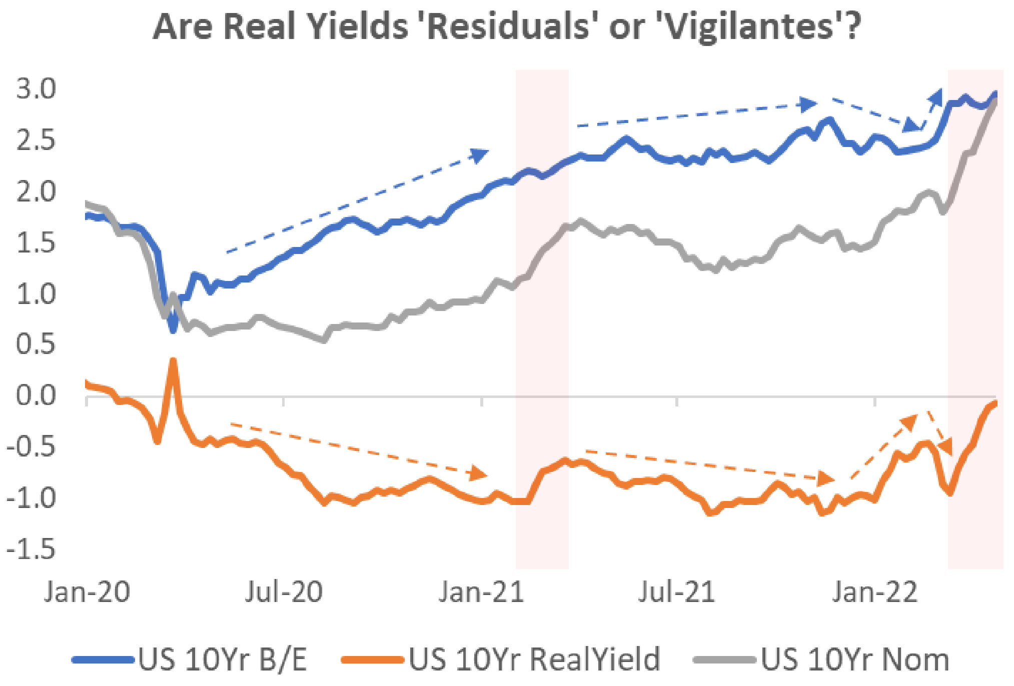
Conundrum 2.0? Why Are Nominal Yields Below Breakevens?

Do inflation-indexed/real yields reinforce 'neutral' if central banks are seen to be 'behind'?

Residual? If nominal rates are 'fixed', then rising breakevens push real yield lower

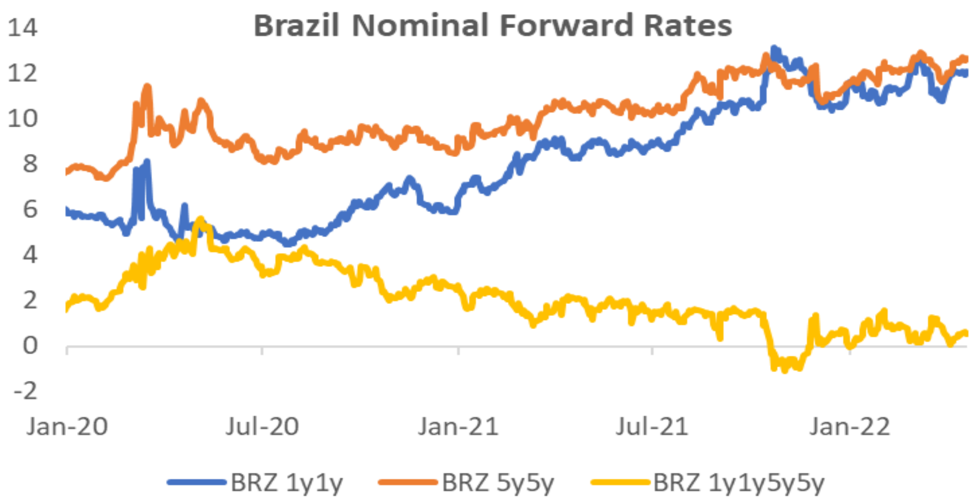
Vigilante? If real policy rates seem too low, real rates rise despite rising breakevens

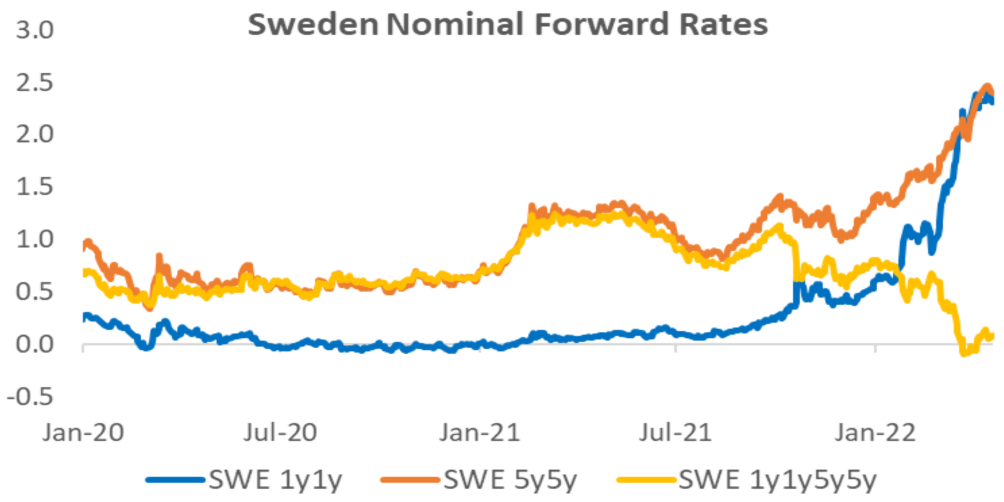


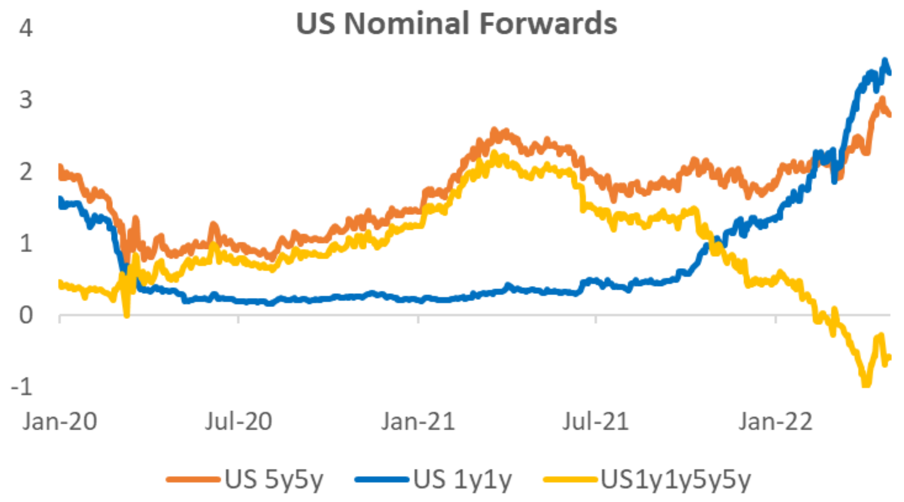


Source: Talking Heads Macro, FRED

Terminal (1y1y) *and* Neutral (5y5y) 'Estimates' Have Risen





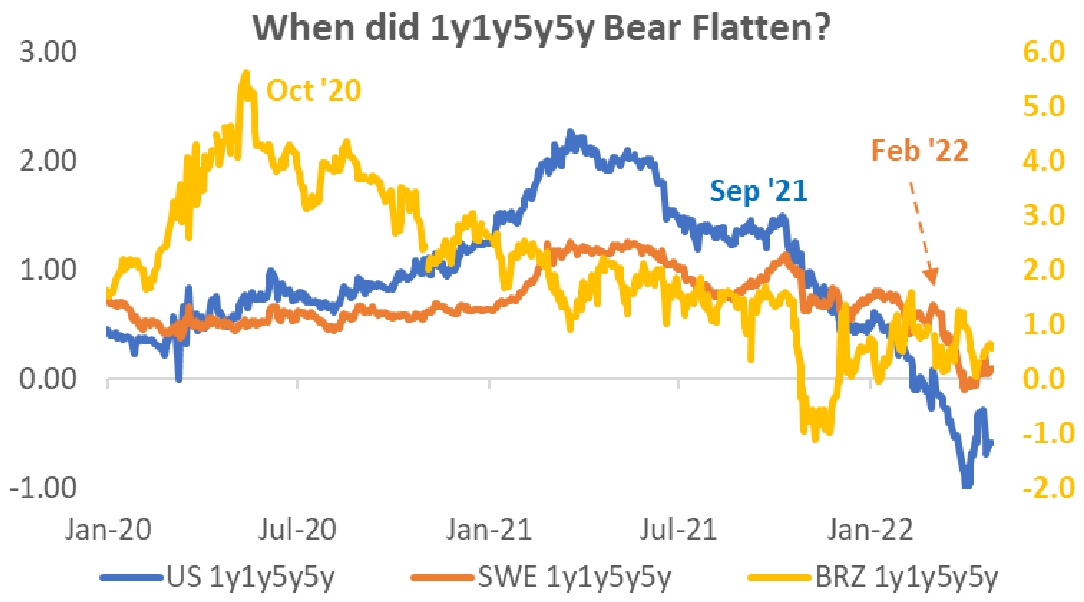


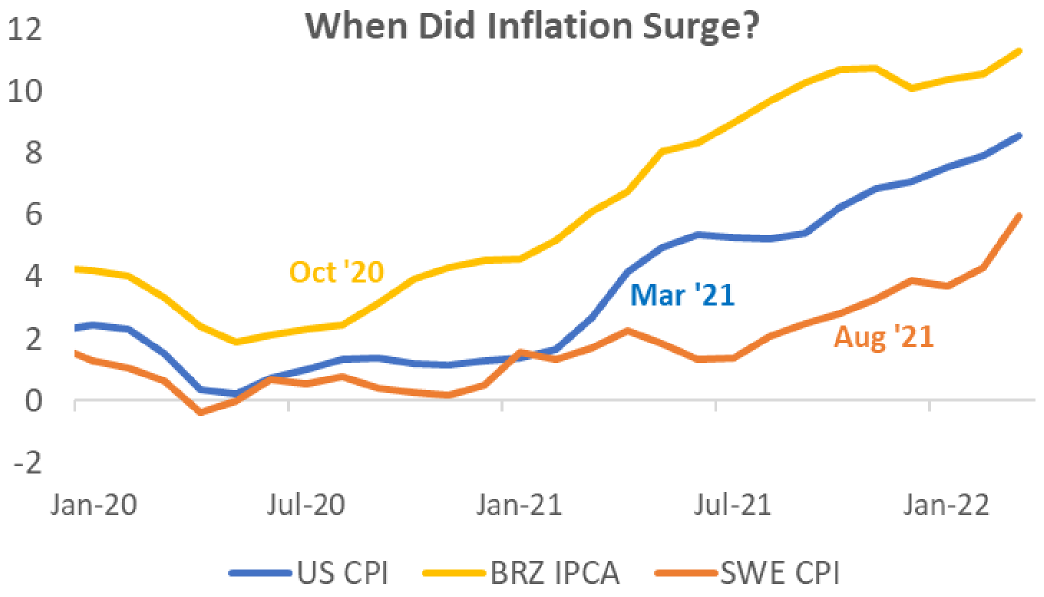
Source: Talking Heads Macroeconomics, Macrobond

Laggards and Leaders – Yield Curves vs Inflation

Brazil, **Mexico** and **New Zealand** saw monetary conditions tighten almost as soon as inflation surged

Despite conditions similar to NZ, the **RBA** resisted. **Sweden's** green energy may have created a delay?

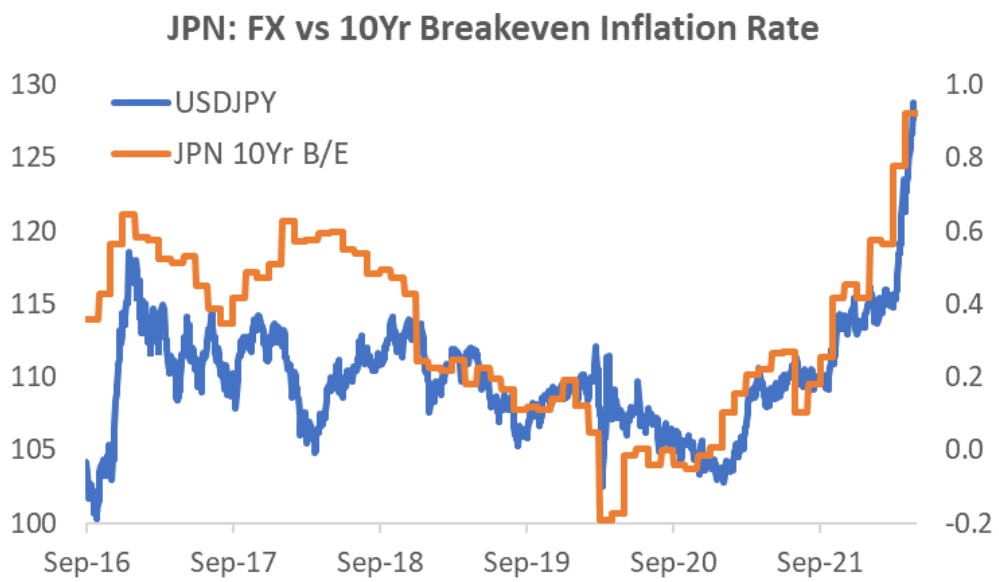




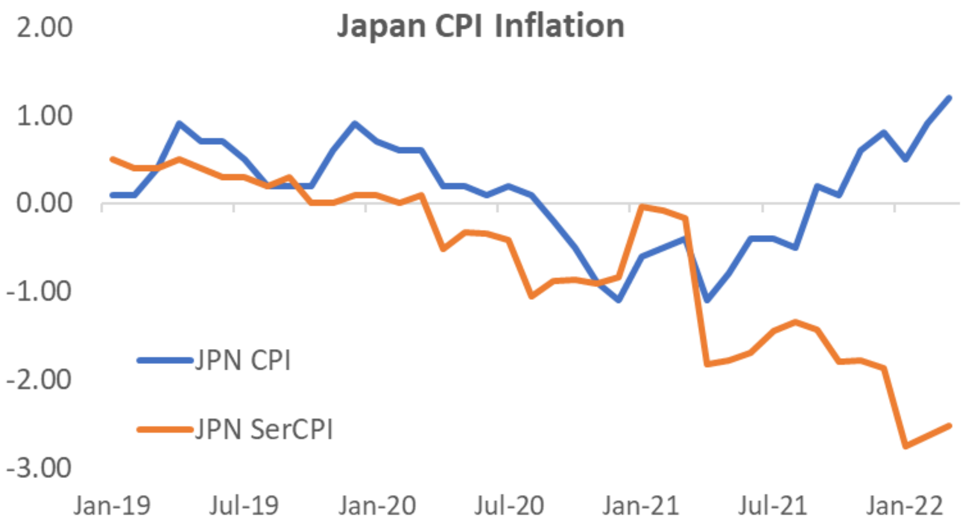
Source: Talking Heads Macroeconomics, Macrobond

JPY Shorts: A Classic Attempt to Drag the BoJ into Tightening

In Japan, market are ‘using’ FX to force the BoJ’s hand
- If it doesn’t, JPY shorts and long B/E positions grow



The BoJ’s threshold for action (say 2%) may be met soon due to (i) communication one-offs pass (ii) FX pass-thro.



Source: Talking Heads Macroeconomics, Macrobond

Whither the 'Fragile Five'?

China created greater damage despite the 'Taper Tantrum' Narrative

Crises/recessions/capex in RUS, BRZ, NOR, CAN suggests China damaged EM by more.

Post commodity crisis (2014-18): No investment response to commodity prices → FX not responsive to terms of trade → China now affects mostly North Asia, not so much the broader EM complex.

Turkey and Argentina crises in 2018 can be attributed to the Fed: 3% 2y vs EM premium

Whither the Fragile Five?

Turkey – an extremely difficult path back to orthodoxy and market access

India, Indonesia, South Africa on a structurally promising path – zero real rates

Brazil – cyclically protected.

Source: Talking Heads Macro

Role Reversal: AE CBs May Not be Able to Ease in a (Mild) Recession - EMEs Can Ease Even as the Fed Hikes

Inflation in the AEs may remain higher than in the EMEs

Output gaps, housing and labour markets (all with supply issues)

Real rates are far lower in the AEs (CE3 are an exception)

The Result?

<u>AE [and CE3] central banks may have to be procyclical</u>: may have to hike into a slowdown, may not be able to ease during a mild recession.

<u>Some EME CBs may be able to cut rates/ be countercyclical even as the Fed hikes</u>

BRZ, MEX lead this trend – KOR [and NZ] next in line

Source: Talking Heads Macro